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EXAMINER

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID FREDERICK LEWIN and MICHAEL BLAISE FAZIO

Appeal 2008-6316
Application 10/066,954
Technology Center 3700

Decided: April 1, 2009

Before DEMETRA J. MILLS, ERIC GRIMES, and
JEFFREY N. FREDMAN, *Administrative Patent Judges*.

FREDMAN, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 involving claims to a package of texturized glass strand. We have jurisdiction under 35 U.S.C. § 6(b). We reverse and enter a new ground of rejection.

Statement of the Case

Background

“In conventional filament forming systems, the streams of glass have been attenuated by winding the filaments on an exterior of a rotating tube. The strand of filaments is wound on the tube as a cylindrical package. The

winding device with the rotating tube pulls the filaments and collects the strand” (Spec. 1, ll. 20-23). According to the Specification, “[t]exturized strand is continuous strand that has been expanded or texturized. The fibers in the strand are separated to give the strand a full, wool-like appearance. Texturized strand has good acoustic and thermal insulative properties. Texturized strand is typically used in sound absorbers” (Spec. 1, ll. 29-33).

The Claims

Claims 15-18 are on appeal. We will focus on claim 15, which is representative and reads as follows:

15. A package of texturized glass strand comprising:
a container having a removable closure;
a glass strand disposed in said container in a texturized, coiled form, wherein said glass strand can be withdrawn from said container for subsequent use when said closure is removed, wherein said glass strand in said texturized, coiled form has a density of 5 to 10 lbs/ft³.

The prior art

The Examiner relies on the following prior art references to show unpatentability:

Galanes	US 3,670,949	Jun. 20, 1972
Mattis	US 3,968,877	Jul. 13, 1976
Ingemansson	US 4,569,471	Feb. 11, 1986

The issues

- A. The Examiner rejected claims 15-17 under 35 U.S.C. § 103(a) as being obvious over Ingemansson (Ans. 3-5).
- B. The Examiner rejected claims 15-17 under 35 U.S.C. § 103(a) as being obvious over Ingemansson and Mattis (Ans. 5-6).

C. The Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being obvious over Ingemansson, Mattis, and Galanes (Ans. 6).

A. *35 U.S.C. § 103(a) over Ingemansson*

The Examiner finds that “Ingemansson discloses glass strands fed into a muffler outer cylinder 14. The muffler outer cylinder is considered a container” (Ans. 3). The Examiner finds that “the filled strand is considered texturized” (Ans. 4). The Examiner finds that “the cover plate is considered a closure” (Ans. 4). The Examiner finds that “Ingemansson does not expressly disclose the density of the glass strand within the container. At the time the invention was made, it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the glass strand in the claimed densities” (Ans. 4).

Appellants contend that the “‘function and structure of the claimed invention’ is completely different from that of the prior art. ‘Common sense’ thus dictates that the claimed invention and that of Ingemansson are simply not the same” (App. Br. 10). Appellants contend that Ingemansson “is simply not from the same field of endeavor as the invention of claim 15” (App. Br. 11).

Appellants contends that “a welded end piece of a muffler 13 cannot qualify as the ‘removable closure’ of claim 15, even giving the term ‘removable’ its broadest reasonable interpretation in accordance with the specification, as the law requires” (App. Br. 13). Appellants contend that “[n]o substantial evidence in the record supports any possible conclusion that the wool used in the muffler of Ingemansson is of a comparable density

and, in fact, Appellant has submitted evidence that this wool is actually without the claimed range (see *Exhibit A*)” (Ans. 16).

In view of these conflicting positions, we frame the obviousness issue before us as follows:

Did the Examiner err in finding claims 15-17 obvious over the disclosure of Ingemansson?

Findings of Fact (FF)

1. Ingemansson teaches “a muffler for a combustion engine, with a space containing fiberglass wool” (Ingemansson, col. 1, ll. 8-9).

2. Ingemansson teaches that fiberglass thread is treated “so that the thread will emerge from the nozzle as a ‘wool sausage’, i.e. as wool with substantially continuous fibers. The wool is blown directly into the muffler” (Ingemansson, col. 3, ll. 42-45).

3. Ingemansson teaches that “[w]hen the muffler 13 is filled, it is moved to a station . . . for welding on the lefthand end piece” (Ingemansson, col. 3, ll. 67-68).

4. Ingemansson teaches that a cover may be “temporarily placed over the opening of the muffler before the hose 17 is disconnected to prevent the wool from coming out during transport” (Ingemansson, col. 4, ll. 4-7).

5. The Examiner finds that the “strand of Ingemansson is inherently capable of being removed for subsequent use since Ingemansson lacks any permanent fastening means” (Ans. 4).

6. The Examiner finds that “[f]igures 1 and 3 show the fibers as looped/coiled and since the length of the container is a much greater

dimension than a strand loop-coil, the deposit of the strand will be in multiple layers” (Ans. 4).

7. The Examiner finds that “Ingemansson does not expressly disclose the density of the glass strand within the container” (Ans. 4). The Examiner finds that “it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide the glass strand in the claimed densities because applicant has not disclosed that the specific density provides an advantage, is used for a particular purpose, or solves a stated problem” (Ans. 4).

Principles of Law

The question of obviousness is resolved on the basis of underlying factual determinations including: (1) the scope and content of the prior art; (2) the level of ordinary skill in the art; (3) the differences between the claimed invention and the prior art; and (4) secondary considerations of nonobviousness, if any. *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). The Supreme Court has recently emphasized that “the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ.” *KSR Int’l v. Teleflex Inc.*, 550 U.S. 398, ___, 127 S. Ct. 1727, 1741 (2007).

However, the Court in *KSR* stated, “[o]ften, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to

combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit. *See In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) (“[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”). *Id.* at 1740-1741.

Claim terms are interpreted using the broadest reasonable interpretation in light of the Specification. *See, e.g., In re Hyatt*, 211 F.3d 1367, 1372 (Fed. Cir. 2000) (“[D]uring examination proceedings, claims are given their broadest reasonable interpretation consistent with the specification.”). *Also see In re Morris*, 127 F.3d 1048, 1054-56 (Fed. Cir. 1997) (“Absent an express definition in their specification, the fact that appellants can point to definitions or usages that conform to their interpretation does not make the PTO's definition unreasonable when the PTO can point to other sources that support its interpretation.”)

Analysis

Ingemansson teaches fiberglass wool which is placed into a container, specifically a muffler (FF 1-6). Ingemansson teaches that the muffler is welded shut (FF 3). While the Examiner acknowledges that Ingemansson does not teach the density of the glass strands, the Examiner finds that the specific density recited in claim 15 would have been obvious (FF 7).

The claim phrase “removable closure” imposes a structural requirement on the container that permits the material within the container to be withdrawn for subsequent use (*see* Claim 15). Even under the broadest

reasonable interpretation rubric, it is not reasonable in light of the Specification to interpret a muffler that is welded shut as comprising a container with a “removable closure” (FF 3). However, we agree with the Examiner that when the cover plate is “temporarily placed over the opening of the muffler before the hose 17 is disconnected to prevent the wool from coming out during transport” (Ingemansson, col. 4, ll. 4-7), the closure is removable (FF 4).

The Examiner provides no specific reason why a density of 5 to 10 lbs/ft³ of texturized glass would have been obvious other than “design choice”. Appellants point out that the “claimed densities are relevant because they demonstrate that Appellant’s invention is a package of texturized glass strands for later use, and thus have a density as packaged that different [sic differs] from that created through further processing prior to use, such as in a muffler” (App. Br. 16). We agree with Appellants that the function of the claimed texturized glass, intended for packaging for later use, differs from the function in Ingemansson, where the texturized glass is immediately placed in its final operative location. *See In re Gal*, 980 F.2d 717, 719 (Fed.Cir.1992) (finding of “obvious design choice” precluded where the claimed structure and the function it performs are different from the prior art). The Examiner has not adequately shown that it would have been obvious to use texturized glass at the recited density in Ingemansson’s muffler.

Conclusion of Law

The Examiner erred in finding claims 15-17 obvious over the disclosure of Ingemansson.

B. 35 U.S.C. § 103(a) over Ingemansson and Mattis

The Examiner rejected claims 15-17 under 35 U.S.C. § 103(a) as being obvious over Ingemansson and Mattis (Ans. 5-6).

As we have reversed the rejection of claims 15-17 over Ingemansson alone, and Mattis does not teach the densities of textured glass missing from Ingemansson, we are also compelled to reverse the rejection of claims 15-17 over the combination of Ingemansson and Mattis.

C. 35 U.S.C. § 103(a) over Ingemansson, Mattis, and Galanes

The Examiner rejected claim 18 under 35 U.S.C. § 103(a) as being obvious over Ingemansson, Mattis, and Galanes (Ans. 6).

Claim 18 depends from claims 15-17. As we have reversed the rejection of claims 15-17 over Ingemansson and Mattis, and Galanes not teach the densities of textured glass missing from Ingemansson and Mattis, we are also compelled to reverse the rejection of claim 18 as well.

New ground of rejection

Under the provisions of 37 C.F.R. § 41.50(b), we enter the following new ground of rejection.

Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sieloff¹ in view of Galanes.

¹ Sieloff et al (Sieloff) U.S. Patent 4,555,447 (Nov. 26, 1985).

Findings of Fact

8. The Specification teaches that the “texturized product is typically created by expanding a continuous strand of glass fibers. The strand is expanded by directing compressed air at the strand as it passes through a texturizer to separate filaments in the strand” (Spec. 3, l. 34 to 4, l. 1).

9. The Specification teaches that the “frequency and length of the coils in the strand 80 are determined by the flow and pressure of the compressed air in the nozzle 20” (Spec. 5, l. 36 to Spec. 6, l. 1).

10. Sieloff teaches a method where “streams of glass, centrifuged from the spinner, engaged by a vertically downwardly directed annular gaseous blast for attenuating the centrifuged streams of fibers” are used to produce glass wool (Sieloff, col. 2, ll. 65-68).

11. Sieloff teaches placing the strands in a container, noting that “columns of fiber glass blowing wool may be produced and bagged” (Sieloff, col. 3, ll. 65-66). Sieloff teaches that the bagged glass wool is later “blown into place for insulation” (Sieloff, col. 3, l. 68).

12. Sieloff teaches that “[d]ensities of glass fiber material in the range of about 0.2 to 20 pounds per cubic foot may be used in this invention” (Sieloff, col. 3, ll. 53-54).

13. Sieloff teaches that the glass strand may be bonded into layers, where “[a]ny binder suitable for bonding glass fibers together in batt or mat form can be used with glass fibers to form the bonded glass fiber material” (Sieloff, col. 3, ll. 18-20).

14. Sieloff does not teach placement of the material into a corrugated box.

15. Galanes teaches “a collapsible and reusable carton suitable for a variety of purposes” (Galanes, col. 1, ll. 1-2). Galanes teaches that a “preferred packaging material is corrugated cardboard” (Galanes, col. 4, l. 57).

16. Galanes teaches a carton with advantages including “enhanced durability and strength . . . having reinforced wall panel construction . . . so as to prevent tearing and rupture of the carton when the carton is manually lifted with a load . . . [and] having dual panel bottom panel construction which is designed for increased strength in order to prevent failure of the bottom of the carton when subjected to a heavy load” (Galanes, col. 1, ll. 9-20).

Principles of Law

“[T]he existence of overlapping or encompassing ranges shifts the burden to the applicant to show that his invention would not have been obvious.” *In re Peterson*, 315 F.3d 1325, 1330 (Fed. Cir. 2003). Also, “[i]t is also an elementary principle of patent law that when, as by a recitation of ranges or otherwise, a claim covers several compositions, the claim is ‘anticipated’ if *one* of them is in the prior art.” *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 782 (Fed.Cir.1985).

“Where, as here, the claimed and prior art products are identical or substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his

claimed product.” *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977). “Whether the rejection is based on ‘inherency’ under 35 U.S.C. § 102, on ‘prima facie obviousness’ under 35 U.S.C. § 103, jointly or alternatively, the burden of proof is the same, and its fairness is evidenced by the PTO’s inability to manufacture products or to obtain and compare prior art products.” *Id.* at 1255.

Analysis

Sieloff teaches packages, specifically bags, of texturized glass wool (FF 11). Sieloff teaches that the glass strand can be withdrawn for subsequent use (FF 11). Sieloff teaches that the glass strand has a density of 0.2 to 20 lbs/ft³, encompassing the claimed density range of 5 to 10 lbs/ft³ (FF 12). *See Peterson*, 315 F.3d at 1330 (“[T]he existence of overlapping or encompassing ranges shifts the burden to the applicant to show that his invention would not have been obvious.”)

Regarding the coiling required by claims 15 and 16, Sieloff teaches forming the texturized glass wool using gaseous blasts just as Appellants’ Specification teaches forming texturized glass with blasts of compressed air (FF 8, 10). Appellants’ Specification teaches that upon forming the glass wool using the compressed air, the glass wool will inherently comprise some amount of coils, where the frequency and length of the coils are dependent upon the flow and pressure (FF 9). Consequently, since the texturized glass wool of Sieloff is formed by gaseous blasts of some flow and pressure, the resulting glass wool will inherently comprise some level of coiling as evidenced by the teaching of the Specification (FF 9). *See Best*, 562 F.2d at 1255 (“Where, as here, the claimed and prior art products are identical or

substantially identical, or are produced by identical or substantially identical processes, the PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his claimed product.”) No specific levels of coiling are required by the claims.

Regarding the layers required by claim 17, Sieloff teaches that the glass strand may be bonded into layers, where “[a]ny binder suitable for bonding glass fibers together in batt or mat form can be used with glass fibers to form the bonded glass fiber material” (Sieloff, col. 3, ll. 18-20; FF 13). In placing the mat or batt into the bags, the glass strand of Sieloff would be disposed in a series of layers (*see* FF 11, 13).

While Sieloff does not teach the use of a corrugated box, Galanes teaches the use of a corrugated box (FF 14-15).

It would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made to place the glass wool of Sieloff into a corrugated box as taught by Galanes since Sieloff desires storing the glass wool in containers (FF 11) and Galanes teaches a carton with advantages including “enhanced durability and strength . . . having a reinforced wall panel construction . . . so as to prevent tearing and rupture of the carton when the carton is manually lifted with a load . . . [and] having dual panel bottom panel construction which is designed for increased strength in order to prevent failure of the bottom of the carton when subjected to a heavy load” (Galanes, col. 1, ll. 9-20; FF 16). An ordinary practitioner would have been motivated to place the glass fiber of Sieloff into the boxes of Galanes in order to obtain the benefits of strong and durable cartons.

SUMMARY

In summary, we reverse the rejection of claims 15-17 under 35 U.S.C. § 103(a) as being obvious over Ingemansson. We reverse the rejection of claims 15-17 under 35 U.S.C. § 103(a) as being obvious over Ingemansson and Mattis. We reverse the rejection of claim 18 under 35 U.S.C. § 103(a) as being obvious over Ingemansson, Mattis, and Galanes.

This decision also contains a new grounds of rejection pursuant to 37 C.F.R. § 41.50(b) (effective September 13, 2004, 69 Fed. Reg. 49960 (August 12, 2004), 1286 Off. Gaz. Pat. Office 21 (September 7, 2004)). 37 C.F.R. § 41.50(b) provides "[a] new ground of rejection pursuant to this paragraph shall not be considered final for judicial review."

37 C.F.R. § 41.50(b) also provides that the Appellants, **WITHIN TWO MONTHS FROM THE DATE OF THE DECISION**, must exercise one of the following two options with respect to the new ground of rejection to avoid termination of the appeal as to the rejected claims:

(1) Reopen prosecution. Submit an appropriate amendment of the claims so rejected or new evidence relating to the claims so rejected, or both, and have the matter reconsidered by the Examiner, in which event the proceeding will be remanded to the Examiner. . . .

(2) Request rehearing. Request that the proceeding be reheard under § 41.52 by the Board upon the same record. . . .

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

REVERSED, § 41.50(b)

Ssc:

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